

DEPARTMENT OF THE INTERIOR  
BUREAU OF EDUCATION

# WANTED

## TEACHERS TO ENLIST FOR CHILD HEALTH SERVICE!



(Courtesy of the Children's Playground Association, Baltimore.)

*Clean Bodies. Clean Clothes, Clean Minds, Help Make Vigorous, Disease-Resistant Children*

**T**HE children of the country, over 25,000,000 strong, who represent our Nation's future, are endangered. In all of the warring countries—England, France, Belgium, Germany, etc.—the health of the children has already shown distinct marks of deterioration, due to war conditions. Our own country is no exception. The physical impairment of the coming generation is one of the most disastrous by-products of the Great War, and one whose aftereffects, once established, can never be fully undone. The ending of the war does not end this danger. These after-effects can, however, be prevented, and the teachers of the country can make a big contribution to this work of prevention. It demands immediate activity. Hence this call to you for service.

You may be the teacher of a rural school, in charge of a squad of perhaps only twenty members of the creators of our future. Or you may be a superintendent, responsible for twenty regiments of children. In any case you will have an opportunity this year, in connection with their health, which may never recur in the history of the country. A little energy, wisely applied at this time of crisis, will accomplish great results. Your opportunity is one which only you can develop.

Enlistment in the health service will take as little time or as much time as you are able to give. It may mean simply an opening exercise some morning, involving the weighing and measuring of all the children in your classroom. Or, if you are one of the men higher up, it may mean a carefully laid out health program involving a correlation of several school activities—of work done in the departments of physical education, medical inspection, domestic science, the school lunch, hygiene—and the focusing of all this work on the practical problem of bringing each child in your school up to the highest possible standard of physical efficiency.

### THE FIRST STEP.

In any case, the first step involves the weighing and measuring of the children in your charge, to find out how many of them are physically below the standard; you must not be surprised if you find that from 50 to 60 per cent of them are below. The experiment involves no expensive apparatus, no detailed plans, for its initiation. It requires merely a teacher of vision and energy, who will take the first step and set the ball rolling in the community. The results will speak for themselves, and are sure to arouse further interest. It may not be so dramatic to weigh and measure children in a school-room as it was to drive an ambulance in France, or to do actual fighting in the trenches, but the service to the nation is quite as real.

The insidious attacks of malnutrition upon the children of the country constitute a danger which is sapping our vital energy as truly as were the onslaughts of the Germans on the battle line. Our weapons of warfare against this enemy at home are not the sword and bayonet, but the scales and measuring tape. What the plumb line is to the builder, what the measuring rod is to the engineer, that the scales are to the student of child health. Fortunate indeed are we that our index is so simple, and that, although untrained in medical matters, we may become, if we will, Soldiers of the Measuring Brigade.

### SIX MILLION MALNOURISHED CHILDREN IN THE COUNTRY.

In any truly civilized country as rich and intelligent as our own it ought to be difficult to discover even a dozen children developing into manhood or womanhood under the handicap of even a single remediable physical defect. We all know perfectly well how such things as faulty vision or faulty teeth will affect the physical and mental development of an otherwise healthy child. But in spite of all our talk concerning the precious asset of child health, such defects are so common that nobody has ever taken the trouble to find out exactly to what extent they prevail among our children to-day. It is estimated by the best authorities that three out of every four children in

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this country are suffering from some physical defect which might be prevented or corrected. This means that there are, perhaps, 15,000,000 such school children in this country to-day.

### THE DRAFT REVELATIONS HAVE OPENED OUR EYES.

The draft revelations showing, as they did, that at least one out of four of our young men who ought to be in the flower of their prime were physically unfit to bear arms for their country, recently shocked us out of some of our complacency and apathy. We determined that such a situation should not overtake us again in the future. To back



(Courtesy of the Children's Playground Association, Baltimore.)

up our determination we must begin on the children who are now in school.

Every one of these children, handicapped however slightly by some physical defect, is failing to attain quite the physical and intellectual development of which he is capable. When weighed and measured these children will all be just a little below standard. Moreover, of these 15,000,000 handicapped children there is a large group, estimated at possibly 6,000,000, who are in such bad physical condition and who fall so decidedly below the normal standard of weight for their age and height that their condition demands immediate recognition and attention. From one cause or another every member of this great group of children is suffering not merely from one but from many physical defects. They constitute the class of "malnourished" children, whose great number is a shame of our civilization. These



children who do not measure up to standard become, in later years, the men and women who do not "measure up"—the men who are physically unfit to bear arms in their country's time of need, the women who are physically unfit to become the mothers of men.

### **WE MUST HELP CHILDREN TO RESIST DISEASE.**

During the next year, moreover, the country can not afford to have any preventable illness. The war is over, but the scarcity of physicians and nurses available for the civilian population will continue. The children will appreciate the significance of this situation. They will realize that it is their patriotic duty to be as strong and well as possible, to build up healthy, disease-resisting bodies, whose cells are stronger than the disease germs which attack them, ready, like a well-drilled home defence army, to resist any attacks of the forces of ill health. Never before was there such a time as the present for driving home the lessons of personal hygiene. We must strike while the iron is hot. The call to health service is an emergency call.

It is, of course, desirable that all of the children suffering from any serious physical defect whatever should have medical attention. As an emergency measure, however, we should give consideration, first of all, to that great group of under-nourished children whose condition is strikingly below par.

### **WHAT IS MALNUTRITION?**

Malnutrition is a definite departure from health which should be recognized as much as tuberculosis. It has certain definite causes and definite after effects. Moreover, some of these aftereffects can never be entirely overcome. An adult may be underfed for a long period without any serious result, but the child who suffers from serious malnutrition may never be so strong and capable as he might have been. Malnutrition is something which in the great majority of cases is preventable and curable. Its detection requires no expert medical knowledge or careful microscopic examinations. The weight of the child and his rate of gain usually tell the story.

In the best-regulated families the baby is regularly weighed every week, and great is the concern of those interested if he does not gain his standard 4 to 6 ounces a week. It is a sad commentary on our health methods that we have so carefully weighed the baby but allowed the runabout and the school child to go with little or no attention in this respect.

The malnourished child is always underweight. One may class every child who is as much as 10 per cent underweight for his height as a malnourished or undernourished child. Such children are usually pale and anaemic, inattentive, listless in their studies, and disinclined to run and play. They are easily fatigued, both mentally and physically, and are often retarded in their school work. The malnourished child is peculiarly susceptible to disease, he is always catching whatever disease happens to be making the rounds. His muscles are soft and flabby.

### **HEALTH BEFORE BOOKS.**

What folly to attempt to force such a child through the regular mill of school work! It results merely in time and money wasted by the

teacher and the school system, and failure and discouragement on the part of the child who can not keep up with his mates. We must in our school work learn to harness our energy where it will bring most fruitful results; and we shall find that in dealing with our 6,000,000 malnourished children, the most fruitful results, both mentally and physically, will be obtained by directing our primary



*Wholesome outdoor activity with a worth while object in view is one of the best aids to health. Last year 1,500,000 children in the U. S. School Garden Army of the U. S. Bureau of Education helped Uncle Sam by raising \$20,000,000 worth of food and helped themselves by thus aiding their own health. Let us make it 5,000,000 children this year.*

attention toward the physical condition of these children rather than by attempting to goad them into mental work of which they are physically incapable.

### FIND THE CAUSE IN EACH CASE.

Poverty and overcrowding, bad home habits, faulty school hygiene, acute disease—all these are common causes of malnutrition. The case of each child must be carefully considered and the causes of his

condition searched out and eliminated through proper medical attention and education in hygienic living, and especially by training in food knowledge and correct food habits.

### PHYSICAL DEFECTS SHOULD BE CORRECTED.

First of all, the child's remediable physical defects must be removed. It is foolish to tell a child suffering from enlarged adenoids that he must breathe through his nose and have plenty of fresh air. The adenoids must come out first. It is useless to impress upon a child the necessity of thoroughly chewing his food, if his teeth are carious and deficient. Eye strain frequently means nausea and loss of appetite, resulting in malnutrition. Lack of fresh air while sleeping and exercising, lack of cleanliness and proper clothing, fast eating,

the indulgence in candy and sweets between meals, indulgence in tea and coffee—any one or all of these apparently simple causes may result in physical disaster for the child. It is the teacher's privilege to help correct wrong conditions like these, which are so simple and so seemingly trivial that we have failed altogether to regard them seriously.



*The Game.*

### HOW TO COMBAT MALNUTRITION.

How then is the teacher to go about his work in rooting out the causes of malnutrition?

Let us suppose that you are a grade teacher, responsible for a single class of children, or, if you are a man higher up, that you wish to try out some simple plan on a single class first of all. The first thing to do is to interest the children in the game of getting weighed and comparing their condition with the average condition as shown in the accompanying height and weight tables. This is not a difficult thing to do, because all children occasionally drop in at the butcher's or grocer's to get weighed, simply for the fun of knowing where they stand with relation to each other.

### SCALES IN EVERY SCHOOL.

If you are fortunate enough to have scales in your school, have them brought into your room and do the weighing and measuring as a part of some opening exercise, or special exercise on Friday afternoon. There should be scales in every school, but at present only one school in a thousand possesses them. It may, therefore, be necessary for you to enlist the cooperation of some butcher, grocer, or hardware dealer and get him to lend you scales for the purpose.



Since the significance of a child's weight lies in its relation to his height—some children being naturally shorter of stature than others, with no detriment to their general health—the height of the children must be carefully ascertained. A tape measure tacked to the wall is all that is necessary for this purpose.

### GAIN IN WEIGHT AND HEIGHT.

While the relation of weight to height is significant as a starting point to determine a child's condition as regards nutrition, his rate of gain in weight and height is even more important as showing his progress. In healthy children growth in height and gain in weight go on together and usually at the same rate. In neither of these is the increase uniform or continuous for long periods of time. There are seen with nearly all children periods of a few months in which growth and gain in weight are more rapid, followed by months in which both are slower. *Gain in weight is usually more rapid in the fall and spring months; less rapid in winter and midsummer.* Children who are much below normal weight usually gain rapidly when the cause of the low weight can be removed.

### THE CHILD MUST DO HIS PART.

In a simple weighing contest there is one definite thought which you can easily get to the children, namely, that *there is such a thing as an average weight for a given height and age*, and that if they fall below that average they are below par. If they are so unfortunate as to be as much as 10 per cent below par (and from about 15 to 20 per cent of your children will probably show this result), they must as patriotic citizens make a special effort to bring themselves up. The discussions which will result, as to the things which make a child grow, and the things which keep him from being strong and healthy, will make the child realize that his future health and efficiency lie largely within his own control.

Where physical defects are found, exert your influence to have them removed. Here is your opportunity to enlist the interest of the man higher up, to set going your machinery involving the school doctor and school nurse, if your school is equipped with this sort of medical service. If your school is not so equipped, could any demonstration more clearly point out the need, and the immediate need, of instituting it?

If in your weighing contest you simply get the idea of the *standard weight for a given height* firmly established in the minds of the children and your principal—if you do this one thing and nothing more—you will have put in the entering wedge. Other teachers will almost certainly follow your example, and the ground will be prepared for other constructive work later on.

Let us suppose, however, that you are able and willing to devote a little more time to the matter, and make the weighing contest a regular monthly feature of your schoolroom. In that case you will wish to keep a schoolroom record of the gains in weight, which you can hang on the wall in plain sight, as a constant incentive for the underweight children. The Bureau of Education will supply copies of these schoolroom records to teachers who request them.

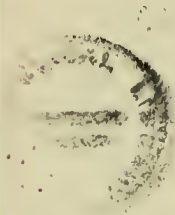
## ORGANIZE A NUTRITION CLASS.

One of the most interesting results which could follow the keeping of such a classroom weight record would be the organization of a "nutrition class" for the malnourished children. In order to organize such a class it will be essential to enlist the services of a physician who understands and sympathizes with the child's point of view. The idea underlying such a class is to secure the active cooperation of the child and its parents in raising the health standard of the child. The game of gaining weight is made interesting and graphic through the use of individual weight charts for each child, and the group spirit, and spirit of rivalry are appealed to.

The Bureau of Education is ready to advise you in regard to the diet of children and to help you with your problems if you will write to us concerning them. If you organize a weighing contest tell us about your results. We wish to keep in touch with you.

Address inquiries to Division School Hygiene, Bureau of Education, Washington, D. C.

LUCY OPPEN.



## HEALTH ESSENTIALS

### TO BE EMPHASIZED EVERY SCHOOL DAY.

A full bath more than once a week.  
Brushing the teeth at least once every day.  
Sleeping long hours with windows open.  
Drinking as much milk as possible, but no coffee or tea.  
Eating some vegetables or fruit every day.  
Drinking at least four glasses of water a day.  
Playing part of every day out of doors.  
A bowel movement every morning.

### THESE ARE THE RULES OF THE GAME.

The child whose monthly rate of gain is below average is losing points in the Game of Health.

Every child wants to play a winning game. To do so he must obey the rules of the game.